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COMMAND HISTORY
FOR
1988

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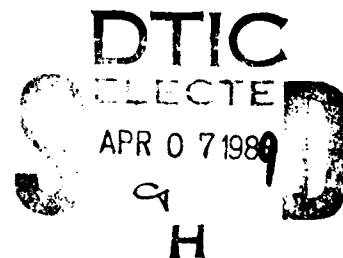
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Command History for 1988

Compiled and reviewed by
Carmen Scheifers
Rachel Dalton

Approved by
Ted M. I. Yellen

Released by
B. E. Bacon
Captain, U.S. Navy
Commanding Officer

and

J. S. McMichael
Technical Director

Navy Personnel Research and Development Center
San Diego, California 92152-6800

ADA206351

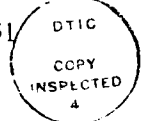# REPORT DOCUMENTATION PAGE

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FIELD	GROUP	SUB-GROUP	
05			

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This report lists NPRDC's mission, functions, organization, CO/TD biographies, key personnel, chronology of 1988 events, history of the Center, resources (financial, personnel, facilities), R&D program, and publications and presentations.

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All other editions are obsolete.

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LIST OF FIGURES

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Codes

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INTRODUCTION

Mission

NPRDC was assigned the following mission:

> To be the principal Research and Development Center for the Department of the Navy's planning and utilization of manpower and personnel and to pursue a coordinated technical development program in the areas of education and training.

It is Center policy to only perform work that falls within the assigned mission, addresses high-priority Navy and Marine Corps requirements, and represents the most efficient use of available resources. We are determined to assist our sponsors, claimants, and customers in identifying and prioritizing requirements for manpower, personnel, and training (MPT) research and development.

Functions

In fulfilling the mission stated above, the Center performs the following functions assigned by the Commander, Naval Military Personnel Command:

1. Plans and develops effective MPT products for Navy/Marine Corps operational application. Provides technical assistance to support the transition and implementation of Center products.

2. Develops and maintains in-house Navy/Marine Corps scientific and technical expertise to provide corporate knowledge, corporate memory, technological innovation, "smart buyer" assistance, and real-world understanding necessary for the development and support of Navy/Marine Corps MPT.

3. Plans and conducts an effective technology base program (basic research, exploratory development, and advanced technology demonstrations) to meet existing and projected operational requirements and to maintain scientific and technical leadership in MPT areas.

4. Develops new systems and methods for determining manpower requirements, allocating manpower resources, developing personnel inventories, and distributing/assigning those inventories to improve military readiness and control costs.

5. Develops systems and procedures for recruiting, selecting, classifying, and utilizing officer, enlisted, and civilian personnel to improve performance and retention. Serves as the Chief of Naval Operations' primary personnel survey resource to coordinate and conduct attitude surveys in the Navy and Marine Corps and to develop new survey technology.

6. Develops and evaluates personnel testing systems and computerized adaptive testing (CAT) versions of the Armed Services Vocational Aptitude Battery. Serves as lead Department of Defense laboratory for overall management of CAT research, development, implementation, and scientific support of the system.

7. Develops training technologies to enhance personnel readiness.

8. Employs existing and emerging technologies in the development and application of training systems to alleviate Navy training problems and improve the Navy's operational readiness.

9. Develops and evaluates performance enhancement and control systems for improving the effectiveness, quality, and productivity of Navy personnel and organizations.

10. Develops, evaluates, and applies innovative personnel assessment technology.

11. Provides the Marine Corps with research and development support in MPT and organizational systems.

12. Provides independent analyses, technical advice, and consultation to research, development, test, and evaluation (RDT&E) and operational managers in matters related to the Center's mission.

13. Investigates, defines, and addresses operational problems related to fleet personnel performance.

14. Maintains a field office in Washington, DC for the purpose of conducting on-site projects.

15. Develops, installs, and provides life cycle support for information management systems.

16. Provides information and reports to higher authority and the scientific community on the progress and accomplishments of the Center's programs.

17. Provides technical support in the development of the BUPERS/NAVMILPERS-COM long-range plan with regard to the infusion of appropriate technology, definition and prioritization of RDT&E requirements, and the transition of products into operational use.

18. Provides information and technical support to the Center's BUPERS/NAVMIL-PERSCOM Program Manager in all matters related to the Center's operation.

19. Develops and maintains liaison with Navy, Department of Defense, and civilian RDT&E organizations for the exchange of information and the establishment of cooperative efforts in MPT areas.

ORGANIZATION

Operating Philosophy

NPRDC is an applied research center, contributing to the personnel readiness of the Navy and Marine Corps. The Center develops better ways to attract qualified people to the naval services, to select the best, to assign them where they are most needed, to train each one effectively and efficiently, and to manage our personnel resources optimally. By combining a deep understanding of operational requirements with first-rate scientific and technical abilities, the Center is unique in being able both to develop new, useful knowledge and to refine technology to address people-related issues. This dual expertise permits the Center to develop the technology base for improving the use of human resources within Navy systems and to apply state-of-the-art technology to solve emerging

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problems. The organizational structure of NPRDC is represented in Figure 1. As a corporate asset, NPRDC is responsive to the needs of MPT managers in the Navy, Marine Corps, and DoD, to the operating forces and to the shore establishment that trains and supports the Fleet.

The R&D methods used by NPRDC are derived from behavioral, cognitive, computer, economic, and social sciences as well as from applied mathematics and statistics. The application of these methods results in tangible products of use to the Navy and Marine Corps. NPRDC constantly searches for technological opportunities to improve personnel readiness and to reduce manpower costs. We are accountable to Commander, Naval Military Personnel Command, our sponsors, and our users for high productivity, strict ethics, honesty, integrity, professionalism, and perspective. The Center's reporting relationship is depicted in Figure 2.

As part of its operating philosophy, NPRDC seeks to do as much of its work as possible in the operational setting where the final products of the effort are intended to be used. This helps to ensure that the needs and requirements of the users are met and that the users themselves become familiar with the operational capabilities of the particular products. In some cases, because of the close researcher and user interaction, the output of interim or prototype products have been put into use before the final product has been completed. Examples of NPRDC's on-site research applications are shown in Figure 3.

Further interaction with operational commands involves a variety of valuable MPT data bases that NPRDC has developed and maintained. Because NPRDC is an in-house, corporate laboratory, these data bases are readily available to support many different operational users and requirements. The data bases, descriptions, and principal users are shown in Figure 4.
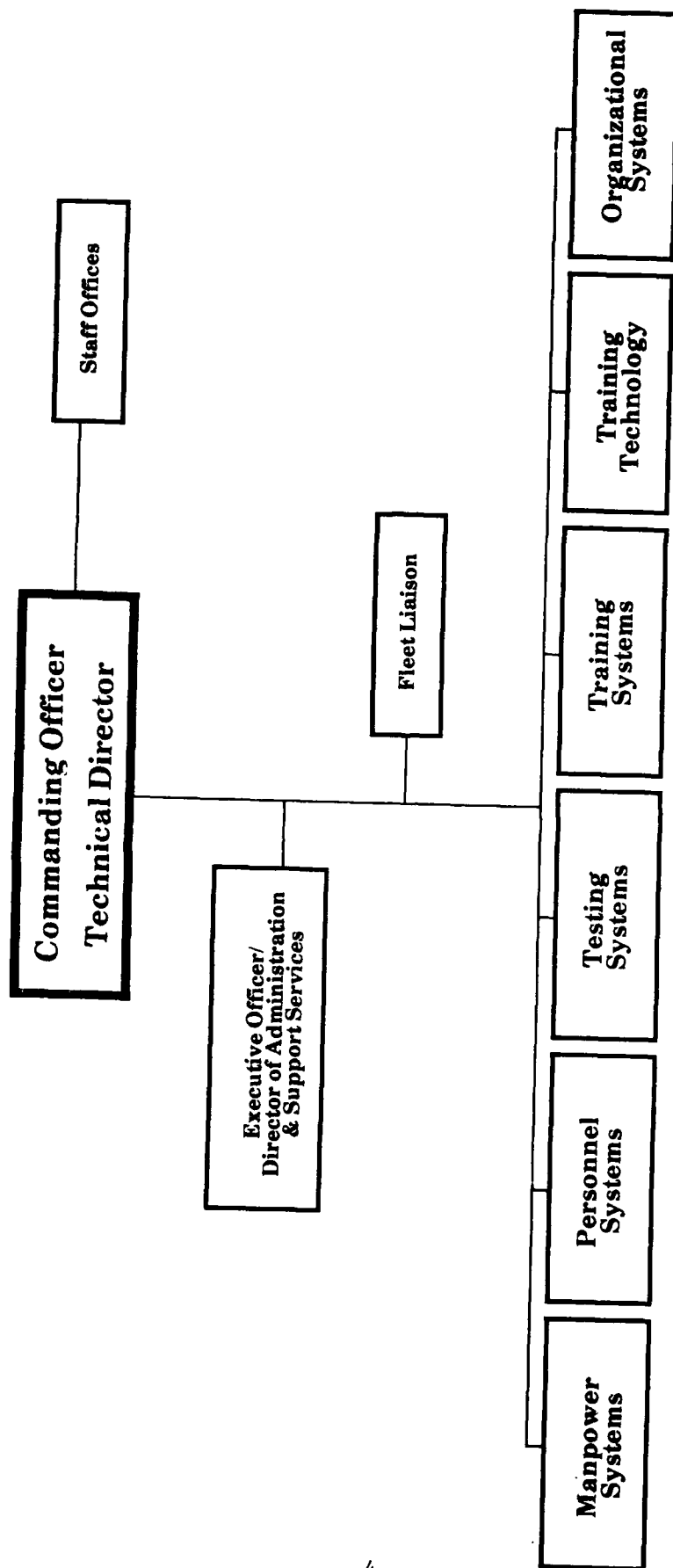
Figure i. NPRDC 1988 organization.

Figure 2. NPRDC reporting relationships.
(Department of the Navy Research, Development, Testing, & Evaluation (RDT&E) Organizations)

*An unofficial Department of the Navy organization chart.

bOP-01.

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Project	Application	Site
Manpower Systems		
Advancement Interface System (ADIN)	Petty Officer Advancement Planning	OP-135C, Navy Annex
Force Analysis Simulation Technique (FAST)	Enlisted Inventory Projection	OP-135D, Navy Annex
Management Decision Simulator (IMAGE)	Manpower Management Training Simulator	DASD (Manpower), Pentagon; USMC Headquarters, Arlington Annex; OP-01/NMPC, Arlington Annex
Structured Accession Planning System for Officers (STRAP-O)	Officer Manpower Analyses	OP-130
Officer Personnel Information System (OPIS)	Officer Information Delivery System (IDS)	OP-130; OP-136
Budget Obligation Analysis & Tracking System (BOATS)	Manpower Budget Management	NMPC-7, Washington, DC; NFC, Cleveland, OH
Defense Personnel Analysis Systems (DPAS)	Defense Personnel IDS	OASD (FM&P)
Enlisted Personnel Allocation & Nomination System (EPANS)	Enlisted Personnel Assignment	EPMAC, New Orleans; NMPC, Washington, DC
Officer Distribution Management System (ODMS)	Officer Distribution	NMPC; CINCPACFLT; CINCLANTFLT; CNET

Figure 3. NPRDC on-site research applications.

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Project	Application	Site
Personnel Systems		
Classification & Assignment Within PRIDE (CLASP)	Maintain/Evaluate Classification & Assignment System	NMPC-48
Personnel Distribution & Career Development (PDCD)	Determine Factors Leading to Pilot Retention	OP-136; OP-130E; OP-59
	Evaluate Equal Opportunity (EO) among Unrestricted Line Officers (URLs)	OP-01 EO Task Force
	Evaluate NAVOP-105 policy	OP-130E; OP-39
	Evaluate Aviation Duty Officer (ADO) Program	OP-130E; OP-59
	Evaluate Materiel Professional (MP) Program	OP-130E
	Develop JSPEC Policy	OP-130E
Officer Selection Systems	Maintain/Evaluate Selection System	U.S. Naval Academy

Figure 3. (Continued).

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Project	Application	Site
Testing Systems		
Computerized Adaptive Testing (CAT-ASVAB)	Data Collection for Score Equating Development	Military Entrance Processing Stations & satellite Mobile Examining Team Sites (San Diego, Richmond, Seattle, Boston, Omaha, Jackson)
Education and Training		
Career Systems Design	Rating Continua Design Methodology	OP-113
USMC Individual Training Standards	Development of Training Standards for over 100 MOSs	HQUSMC/MCCDC, Quantico
Helo Map Interpretation & Terrain Association Course (MITAC)	Improvement of Pilot Navigation Skills	USMC Squadrons
Fixed Wing MITAC	Improved Map Interpretation Skills for Fixed-wing Pilots	MAWTS 1; MCAS, Yuma
Infantry MITAC	Improved Map Interpretation for USMC Ground Combat Personnel	Combat Division Schools (Camps LeJeune & Pendleton)
Intelligent Maintenance Training System	Training of SH-3H, AE & AD Maintenance Personel	NAMTRAGRU, North Island
STEAMER	Training Aid in Teaching Operation of 1200 lb Propulsion System	Surface Warfare Officers School, Coronado

Figure 3. (Continued).

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Project	Application	Site
Electronic Countermeasures & Electronic Counter-countermeasures (ECM/ECCM)	Teaching Recognition of & Response to Electronic Radar System	FCTCPAC; FCTCLANT
S-3B Features Recognition Systems (FADS)	Training of Personnel to Recognize Contacts on Advanced Radar System	VS-27
S-3B Passive Acoustic Decision System	Training of Advanced Acoustic Decision System	VS-27; VS-41; VP-30; VP-31; ASWTRACENPAC/LANT
E-2C	Training of Tactical Personnel in Operation of Radar System	VFW-110; VFW-120
H-53	Computer Training System for USMC H-53 Maintenance Personnel	MCAS, El Toro
Batman & Robin	Tactical Action Officer & Tactical Warfare Overview Courses	FCTCP
	Carrier Airborne Early Warning Weapons School	NAS, Miramar
	Marine Aviation & Weapons Tactics Squadron-One, Commanders & Instructors Weapons & Tactics Courses	MCAS, Yuma
	Wargaming Laboratory	Post Graduate School
	Applied Physics Laboratory Warfare Analysis Laboratory	Johns Hopkins University

Figure 3. (Continued).

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Project	Application	Site
Schoolhouse Productivity	EM "A" School	NTC, Great Lakes
Low Cost Micro-computer Training Systems (CBESS)	Officer & Specialist Threat Recognition Training	Navy & Marine Corps Intelligence Center, Dam Neck
	Tactical Action Officer Threat Recognition Training	FCTCP, San Diego
	Helicopter Crew Threat Recognition Training	Aviation R&D Facility, Ft. Rucker
	Remedial Training (JOBS)	CNTECHTRA
	Remedial Training (SeaBees)	Naval Contruction Training Center, Gulfport
	EM "A" School	NTC, Great Lakes
Authoring Instructional Materials (AIM)	70 Weeks of Instruction in Various Fields	NETSCPAC, Training Systems Development Department
	Over 500 Weeks of Instruction in Engineering & Electrical Systems	NTC, Great Lakes Service School Command
	Submarine Systems	Naval Submarine School, New London
	Trident Engineering, Operations, & Strategic Weapons Training Materials	TRIDENT Training Facility, Kings Bay & Bangor
	NAVSEA Curricula	Naval Ship Weapons System Engineering Station, Philadelphia & Port Hueneme

Figure 3. (Continued).

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Project	Application	Site
AIM (continued)		
Artificial Intelligence (AI) Tools in Authoring	SSN-21 Systems	Newport News Shipbuilding
	Computerized Front-end Analysis Tools	NETSCPAC, Training Systems
	Computerized Front-end Analysis Tools	NTC, Great Lakes, Service School Command
Training Resources Management (TRAINTRACK)	School Planning; Attrition Control; Analysis of Non-productive Time	NETPMSA; CNET; OP-112
Joint Staff Officer Training System	Training on Joint Staff Operations	Joint Chiefs of Staff, Pentagon
AI in Explosive Ordnance Disposal	Computerized Job Aids	EOD Technology Center, Indian Head, MD
Courseware Portability	Programming Standards for CBI/Video	Office of the Secretary of Defense, Pentagon
Organizational Systems		
Guidelines for Transportable Education & Training (GTET)	Transportable Basics of Defense Acquisition Course (BDAC) Materials Prototype	Defense Systems Management College (DSMC)
Experimental Civilian Person-nel Office (EXPO)	Evaluating Innovative, Civilian, Personnel Practices	CECOM, Ft. Monmouth; NSC, Norfolk; USAF Academy; Def. Ind Supply Ctr, Philadelphia; USAREUR NAF, Heidelberg, Stuttgart, Frankfurt; Defense Depot, Memphis;

Figure 3. (Continued).

Project	Application	Site
Expo (continued)		Defense Contracting Administration Services Region (DCASR), Cleveland; Sembach AFB; Patrick AFB; Davis Monthon AFB
Organizational Survey	Develop & Administer Survey	Navy Regional Contracting Center (NRCC), San Diego
NAVAIR Total Quality Management (TQM)	TQM Prototype	NAVAIR-04
DCASR TQM	TQM Prototype	Defense Contracting Administration Services Region (DCASR), Philadelphia
TQM for Office of the Secretary of Defense (OSD)	TQM Educational Design	OSD, USD(A)
DCA TQM	TQM Prototype	Defense Communications Agency (DCA)
Navy Logistics Productivity Quality Improvement	TQM Prototype	Naval Aviation Depot (NADEP), North Island & Cherry Point; Sacramento Army Depot
	TQM Assessment	Pearl Harbor & Portsmouth Naval Shipyards
Productivity Gain Sharing (PGS)	Gain Sharing System	Naval Surface Warfare Center; Naval Avionics Center; Public Works Center, San Diego; Naval Supply Center, Oakland
Acquisition Technology	Technology Enhancements in Program Management Offices	NAVAIR (PMA-273; PMA-260)

Figure 3. (Continued).

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Data Base	Description	Sponsor/User
Manpower Systems		
Defense Planning Programming Category (DPPC) Models	DPPC models forecast manpower based on historical workload data	OP-12G
MPT Assessment Subsystem	Requirements & authorization by DPPC sponsor, program element, claimant, skill, paygrade	OP-12G
MAPRO	Ships, aircraft, & manpower (historical)	OP-12G
FAIM	Historical enlisted Navy personnel data	OP-135
Enlisted Personnel Planning System (EPPS)	Historical & projected Navy enlisted personnel data	OP-135
FAIM-O	Historical longitudinal Navy officer personnel data	OP-130
Officer Personnel Information System (OPIS)	Historical, aggregated Navy officer personnel data	OP-130
USMC Enlisted Personnel Data Base	Historical, longitudinal USMC enlisted personnel data	MPP-20
USMC Officer Personnel Data Base	Historical, longitudinal USMC officer personnel data	MMP-30
QMA Data Base	Qualified military available projections for USMC recruiting regions	USMC

Figure 4. NPRDC data bases .

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Data Base	Description	Sponsor/User
Defense Personnel Analysis System (DPAS)	All-service historical & projected officer & enlisted personnel data	OSD (Manpower)
BOATS	Navy military personnel entitlements data	NMPC-7
Personnel Systems		
NROTC	Applicant information, school performance information, fitrep data	CNET (N–1A)
CLASP	Accession data, job options presented by CLASP	NMPC-48
Naval Academy	Applicant information, school performance information, fitrep data	USNA (Dean of Admissions)
Officer Career	Questionnaire information, Officer master file information	OP-130E
Defense Manpower Data Center (DMDC) ASVAB Data[a]	Navy applicants & accessions by FY used for validation & related studies & analyses	OP-135L/ NMPC-48

[a] Data bases are extracted from larger data bases for use in responding to consumer's requests for data analysis.

Figure 4. (Continued).

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Data Base	Description	Sponsor/User
Reading Grade Level	Examinee data on both ASVAB & reading grade tests, used to estimate reading ability of military accessions without administering a reading test	DoD, Force Management & Personnel (FMP)
Navy Integrated & Training System (NITRAS) Data[a]	Navy class "A" school information merged with ASVAB data & used for ASVAB validation & related studies & analyses	OP-135L/ NMPC-48
Computer Managed Instruction (CMI) Data[a]	Similar to NITRAS data, merged with ASVAB data & used for ASVAB validation & related studies & analyses	OP-135L/ NMPC-48
Personalized Recruiting for Immediate & Delayed Enlistment (PRIDE) Data[a]	Recruitment information (date of enlistment, targeted rating) from automated classification system (CLASP), used for studies on Navy recruits & creating regression formulas used in CLASP	OP-135L/ NMPC-48
American Youth Population (AYP) Data	1980 metric sample for ASVAB (youth 18-23), maintained, used for calibrating new forms of ASVAB, developing population parameters needed for correcting for restriction of range in ASVAB validation samples	OP-135L/ NMPC-48

[a] Data bases are extracted from larger data bases for use in responding to consumer's requests for data analysis.

Figure 4. (Continued).

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Data Base	Description	Sponsor/User
Education and Training		
TRAINTRACK	Maintain operating Navy schoolhouse training data, down to the individual student level, permits look at training effectiveness/costs	OP-11 & CNET-NETPMSA
TRAINTRACK-R	Same type of data as above, maintained for Naval Reserve	Training Performance & Data Center

Figure 4. (Continued).

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Commanding Officer/Technical Director Biographies

Captain Barton E. Bacon III assumed his present duties as Commanding Officer, NPRDC in June 1986.

Captain Bacon graduated from the University of Washington, Seattle, in 1959 and entered the Navy as an Aviation Officer Candidate at Pensacola, Florida. He was commissioned an Ensign in 1960.

Following a tour aboard USS YORKTOWN (CVS 10), Captain Bacon attended submarine school and subsequently served aboard five San Diego-based submarines: USS REDFISH (SS 395), USS VOLANDOR (SS 490), USS SEGUNDO (SS 398), USS SALMON (SS 593) (as Executive Officer), and USS TROUT (SS 566) (as Commanding Officer). Under his command, TROUT was the only fast-attack diesel-electric submarine selected from both the Pacific and Atlantic Fleets for the Battle Efficiency E award.

Captain Bacon served on the staffs of Commander Submarine Squadron 3, Commander Submarine Group 5, Commandant Thirteenth Naval District, Chief of Naval Personnel, and Chief of Naval Operations. During his Washington tours, he served as the Enlisted Rating Coordinator for submarines while assigned to the Bureau of Naval Personnel and to the Department of the Navy Plans and Policy Office (OP-06). He served as the Primary Action Officer for the Navy in the Joint Chiefs of Staff arena for development of Joint Strategic Planning Documents.

After serving as Commanding Officer, Submarine Training Facility, San Diego, from 1980 to 1983, Captain Bacon was assigned to a 2-year tour as Commanding Officer of the amphibious ship USS CLEVELAND (LPD 7). While under his command, CLEVELAND was nominated for the Arleigh Burke Award, representing the most improved ship in the Pacific Fleet.

Captain Bacon comes from a submarine family. His father, RADM Barton E. Bacon II, USN (Ret) (deceased), commanded the submarine USS PICKEREL (SS 524) through five war patrols during World War II. His twin brother, VADM Roger Bacon, USN, is currently assigned as Commander, Submarine Force, U.S. Atlantic Fleet, and his younger brother, Commander Dan Bacon, USN (Ret), served for 20 years in the submarine force. At one period during their respective careers, each brother was in command of a Pacific Fleet submarine.

Captain Bacon is a graduate of the National War College of the National Defense University, the Armed Forces Staff College, Defense Intelligence College, and the Senior Officer Material Readiness School.

Dr. James S. McMichael became the Technical Director of NPRDC in January 1987.

Dr. McMichael entered the Senior Executive Service in October 1984 as Director of the Training Laboratory, Navy Personnel Research and Development Center where he managed personnel research since 1975. His research specialty with the Navy is military training. As Laboratory Director, he directed research in areas such as intelligent systems for training, team training, training management curriculum models, production and quality control, naval career models, Marine Corps training, and low-cost simulation.

From August 1985 to August 1986, **Dr. McMichael** served as Special Advisor for Manpower, Personnel, and Training in the Directorate of Research, Development, and Acquisition (OP-098) and to the Deputy Assistant Secretary of the Navy (Manpower). He had responsibility for advanced-development and engineering development of systems for manpower, personnel and training, for scientific advice on manpower matters to the Director (OP-098), and for policy matters regarding research and development.

Dr. McMichael graduated from Princeton University in 1961 and received his Ph.D. from the University of Delaware in 1965. In 1982 and 1983, he was a fellow in Princeton University's Woodrow Wilson School of Public and International Affairs where he concentrated in economics, management, and international policy.

Prior to joining NPRDC, **Dr. McMichael** chaired the Department of Psychology at Long Island University, where he taught for 10 years.

Key Personnel

Code	Office	Name
00	Commanding Officer	Bacon
00A	Deputy EEO	Mouzon
00B	Civilian Personnel	Hager
OOC	Internal Review	Reynolds
OOD	Security	Ackerman
01	Technical Director	McMichael
01A	Associate Technical Director	Sorenson
01B	Executive Assistant	Thorpe
01C	Washington, DC Office	Kuhn
01D	Technical Program Support	Larson
02	Executive Officer	Almendinger
02A	Internal Control	Griswold
02B	Management Information Systems	Zaske
02C	ADP Acq. & Tele. Comm.	Copeland
21	Comptroller	Bigsby
212	Contracts	Wing
22	Administrative & Military Support	Blann
221	Mailroom	Garcia
23	Technical Information	Yellen
231	Library	Busch
232	PAO/Tech. Transfer/Historian	Turney
233	Pubs/Briefings Production	Scheifers
233G	Graphics	Stout
233RP	Reports Processing	Dalton
24	Facilities Management	Stumpf
03	Fleet Liaison	McGrath
11	Manpower Systems	Silverman
111	Force Management	Rowe
112	Assignment Systems	Blanco
12	Personnel Systems	Pass
121	Selection and Classification	Thomas
122	Career Development Systems	Morrison
123	Evaluation and Survey Research	Somer
13	Testing Systems	Sands
131	Testing Research	Vicino
132	Testing Systems	Borack
14	Training Systems	McLachlan
141	Systems Development	Vacant
142	Systems Application	Baker
15	Training Technology	Aiken
151	Instructional Sciences	VanMatre
152	Instructional Technology	Wulfeck
16	Organizational Systems	Broedling
161	Logistics Management	Dockstader
162	Acquisition Management	Vacant

Chronology of 1988 Events

January

New Employees

Kent Mitoma
  Contract Specialist
  Code 21
  GS-1102-11

Josh Woods
  Supply Clerk
  Code 21
  GS-2005-4

Karl Schroeder
  Supply Clerk
  Code 21
  GS-2005-4

Deborah Jackson
  Clerk Typist
  Code 41
  GS-322-3

Sheila Wing
  Contract Specialist
  Code 21
  GS-1102-12

Craig Borland
  Clerk Typist
  Code 00
  GS-322-03

Miguel Castillanes
  Supply Clerk
  Code 21
  GS-2005-04

Carl Davidson
  Supply Clerk
  Code 21
  GS-2005-04

Separations

Alice Crawford
Pers. Res. Psyc.
Code 51
GM-180-13

Marie McDowell
Librarian
Code 23

Retired

Jim Emery, Center Motor Vehicle Operator and "Servmart Shopper," retired on 2 January after 21 years at NPRDC, and over 40 years of combined military and civilian service with the Navy.

Conference on AI

The Fourth IEEE Computer Society Conference on Artificial Intelligence Applications was held on March 14-18, 1988. The conference was open with 2 days of tutorials, followed by the technical program.

February

New Employees

Michael Nakada
  Economist
  Code 51
  GS-110-12

Peggy Laone
  Clerk Typist
  Code 00
  GS-322-03

Ramon Reyes
  Supply Clerk
  Code 21
  GS-2005-4

BT1 Frederick D. Hunt
  Facilities Maintenance
  Code 25

Separations

Paula U'ren
  Pers. Res. Psyc.
  Code 52
  GS-0180-12

Hue Nguyen
  Computer Specialist
  Code 63
  GS-334-07

BT1 Allen D. Latz
Facilities Maintenance
Code 25

Interdepartmental Seminar

About 30 inquisitive Center employees attended a brown bag seminar presented by Captain Bacon to learn more about shipboard training. The event provided an opportunity for people at the Center to meet informally with each other and learn more about the efforts and work conducted at NPRDC and other related subjects.

Capt Bacon's presentation was the first of a continuing series of relatively informal briefings that was presented every other Wednesday. These professional presentations featured topics about the Navy and research.

Military Award Recipients

Boiler Technician First Class (Surface Warfare) Allen D. Latz, United States Navy, received the Navy Achievement Medal for professional achievement in the superior performance of his duties while serving as Facilities Specialist at NPRDC.

Fire Control Technician Senior Chief (Surface Warfare) Steven Ferguson, United States Navy, received an award for achieving an overall Outstanding Performance on the Command Physical Readiness Test.

Guest Speaker

In celebration of Black History Month, the guest speaker was the Honorable Raymond Edwards, Jr. Judge Edwards is with the San Diego Municipal Court.

Visits/Briefs

On 22 and 23 February, Rear Admiral John S. Disher, Assistant Deputy Chief of Naval Operations (Manpower, Personnel, and Training), Deputy Chief of Naval Personnel and Commander, Naval Military Personnel Command visited the Center to review some of our projects and research programs.

During the 2-day visit, CAPT Bacon and Dr. McMichael presented the Command Overview and management issues relating to the transfer of NPRDC from SPAWAR to OP-01/NMPC.

March

New Employees

Annette Glover
 Secretary (Typing)
 Code 52
 GS-318-05

Linda Zapata
 Clerk Typist
 Code 41
 GS-322-03

Separations

Wendy Delgado
 Secretary (Typing)
 Code 61
 GS-318-4

Carl Davidson
 Supply Clerk
 Code 21
 GS-2005-4

Miguel Castillanes
 Supply Clerk
 Code 21
 GS-2005-4

FUNCTIONAL TRANSFER OF HUMAN FACTORS COMBAT/COMMAND SYSTEMS FUNCTION FROM NAVPERSRANDCEN TO NAVOCEANSYSCEN

In accordance with COMSPAWARSYSCOM ltr 3900 ser 00514/88-078 dtd 29 Feb 88, the human factors function, and associated research and development programs previously assigned to this Center were transferred to the Naval Ocean Systems Center (NOSC) effective 27 March 1988. This transfer includes the positions, incumbents, programs, funding, facilities and equipment associated with the human factors function.

Separations per Functional Transfer

Ernest A. Koehler	GM-00180-14
Robert A. Fleming	GM-00180-14
Thomas P. Enderwick	GM-00180-13
Robert J. Smillie	GM-00180-13
Herman L. Williams	GM-1515-13
William M. Benson	GS-00180-13
Albert Marabedian	GS-00180-12
Jimmy Winchell	GS-00180-12
William Stinson	GS-1515-12
Duane M. Johnson	GS-00180-12
William A. Nugent	GS-00180-12
Richard B. Hall	GS-00180-11
Stephen I. Sander	GS-00180-11
Loretta A. Gould	GS-00344-07
Jeffery D. Grossman	GM-00180-14
David Meister	GS-00180-14
Katheleen Fernandes	GM-00180-13
Susan L. Hearold	GM-00180-13
Ramon Hershman	GS-00180-13
Joseph Dormer	GS-00334-12
Daniel J. Rahilly	GS-00334-12
Donald E. Bamber	GS-00180-12
Susan G. Hutchins	GS-00180-12
Jerry Le Kaiwi	GS-00180-12
Clement D. Urban	GS-00896-12
David G. Rousseau	GS-01550-12
Violette H. Thomas	GS-01515-11
Walter P. Rudolph	ED-00180-00

April

New Employees

ET2 Walter Maxwell
Code 234

Ronald Serafine
Computer Specialist
Code 41
GS-344-9

Separations

Monika Johnson
Supply Clerk
Code 21
GS-2005-4

Annette Glover
Secretary (Typing)
Code 52
GS-318-5

New Assignment

Dr. Richard Sorenson was appointed as the Associate Technical Director of the Center, Code 01A, and will be responsible for assisting the Technical Director in technical responsibility and control of the execution of the Center's R&D programs.

Scientific and Professional Seminar

NPRDC, in association with the Office of Naval Research and the University of Minnesota, co-hosted a symposium entitled "Learning and Individual Differences: Abilities, Motivation, and Methodology" at the University of Minnesota in Minneapolis on 14-16 April 1988.

Visit

Dr. L. G. Marques and Dr. J. M. Oliveira, University of Lisbon, Faculty of Psychology, Lisbon, Portugal visited the Center during a tour to deliver a series of seminars in California and Illinois.

Guest Speaker

On 26 April 1988, a briefing was given by Dr. Harold Booher, Office of the Deputy Chief of Staff for Personnel, U.S. Army, on MANPRINT, How to Deal with the Human Element in System Design.

May

New Employees

Stephen W. Parchman
  Expert
  Code 51
  ED-180

Roger Booth
  Consultant
  Code 51
  EF-180

Thomas Sticht
  Expert
  Code 51
  ED-180

Sandra Brown
  Personnel Assistant
  Code 00B
  GS-203-6

Mary Quenette
  Pers. Res. Psyc.
  Code 62
  GS-180-9

Chen-Ching Chu
  Computer Specialist
  Code 63
  GS-334-7

Separations

Lee Norton
Administrative Officer
Code 61
GS-341-11

Deborah Jackson
Clerk Typist
Code 41
GS-322-3

Marilou Tuanqui
Personnel Clerk
Code 00B
GS-203-5

Commanding Officers Building Inspection

On 17 May 1989, the Commanding Officer conducted a walk-through inspection of all Center buildings. All office spaces, storage areas, equipment and furniture, and safety environment of the buildings were reviewed.

DoD Freezes Spending

SECNAV msg 202208Z May 88 announced a freeze on many categories of spending. For the most part they deal with spending, which results in checks being written to the private sector. They include: (1) award of new contracts and issuance of new orders under existing contracts, (2) deferral of non-mission travel, (3) deferral of training and professional development unless personal or government loss would occur (e.g., non-refundable tuition already paid), (4) the purchase of virtually all categories of supplies and equipment, (5) deferral of building repair or rehab projects (emergency repairs exempted), (6) use of Federal Express or other delivery services, and (7) imposition of a hiring freeze (one hire allowed for each two vacancies).

According to the message, the freeze will be lifted on 30 June.

OPNAVNOTICE 5450 dated 31 May 1988 contained the following directive:

Organization changes. Effective immediately, the following changes are made:

a.   Command and Support.

Echelon

2   Chief of Naval Personnel, Washington, DC
3   Commander, Naval Military Personnel Command, Washington, DC
4   Commanding Officer, Navy Personnel Research and Development Center, San Diego, CA

b. Mission.

To be the principal Research and Development Center for the Department of the Navy's planning and utilization of manpower and personnel and to pursue a coordinated technical and development program in the areas of education and training.

Information. There will be no change in the title, message PLA, or mailing address for the subject shore activity.

June

New Employees

Robert Sniffin
  Pers. Res. Psyc.
  Code 41
  GS-180-14

Danette Cranstoun
  Secretary Typing
  Code 61
  GS-318-06

Separations

Fernando Soriano
  Pers. Res. Psyc.
  Code 62
  GS-180-12

Joyce Mattson
  Pers. Res. Psyc.
  Code 62
  GS-180-13

Stanley Kalish
  Consultant
  Code 62
  EF-180

Nancy Pullman
  Visual Info. Specialist
  Code 233
  GS-1084-7

Judith Lawson
Pers. Res. Psyc.
Code 62
GS-180-12

Visits

VADM Edney (OP-01), visited the Center on 2 June 1988.

1988 Summer Faculty Program

The Center hosted a number of distinguished members of the academic community as part of the Summer Faculty Program sponsored by the Office of Naval Research and The American Society for Engineering Education. These individuals worked with Center staff on research tasks of mutual interest.

July

Guest Speakers

On 18 July 1988, Mr. Edward J. Guss, Deputy Associate Director of Administration, Office of Personnel Management (OPM), gave a presentation on "Personnel Management is Not Brain Surgery or Personnel Management: A Management of People Perspective."

On 26 July 1988, Professor Larry James, Georgia Tech and later at the University of Tennessee, addressed NPRDC personnel on the problems, issues, and questions present in validity generalization.

August

New Employees

Joanne Stagen	Susan King
Secretary	Operations Res. Analyst
Code 41	Code 61
GS-318-04	GS-1515-11

Separations

Pam Thorton	Mary Schratz
Clerk	Pers. Res. Psyc.
Code 63	Code 63
GW-303-02	GS-180-12
Sandi Brown	Lilia Magallon
Personnel Assistant	Accounting Technician
Code 00B	Code 21
GS-203-6	GS-525-5

Promotions

Ron Tiggle
Sheila Wing
Tracy Pope
Doug Wetzel
Jeff Gordon
Ron Stanonik
Len Trejo
Carol Mullins
Kathy Moreno
Del Nebeker
Greg Lewis
Susan Pinciaro
Frank Vicino

Visits

Mr. Richard Efford, professional RDT&E Staff Assistant to the House Appropriations Committee (HAC), and Captain F. Holian, USN, NAVCOMP (OP-09L), visited the Center August 15.

September

New Employees

Barbara Tarker
  Pers. Res. Psyc.
  Code 41
  GS-180-11

David Huntley
  Statistician
  Code 61
  GS-1520-11

Susan King
  Operations Res. Analyst
  Code 61
  GS-1515-11

OSC Vincent Carota
  Code 522

OS2 James Dewberry
  Code 522

Separations

Debra Talbot
  Secretary (Typing)
  Code 23
  GS-318-5

Barbara McDonald
  Pers. Res. Psyc.
  Code 51
  GS-180-12

Retired

MMCM Bob Younger
Dr. Erv Curtis

SPECIAL AWARD CEREMONY

The Recreation Committee hosted a special award ceremony and Center party in honor of **Bob Turney**, Code 232, for completing 50 years of government service.

October

New Employees

Henry Pugh
  Pers. Res. Psyc.
  Code 15
  GS-180-12

Josephine Randel
  Pers. Res. Psyc.
  Code 14
  GS-180-12

George Semb
  Pers. Res. Psyc.
  Code 15
  GS-180-12

Carolyn Huynh
  Computer Specialist
  Code 13
  GS-334-07

Lisa Olsen
  Pers. Res. Psyc.
  Code 16
  GS-180-07

Stephen Parchman
  Training Specialist
  Code 15
  GS-1712-12

Separations

Roxane Morrison
  Clerk Typist
  Code 11
  GS-322-3

Chen-Ching Chu
  Computer Specialist
  Code 13
  GS-334-7

Elaine Frank
  Clerk Typist
  Code 11
  GS-322-3

Stephen Parchman
  Expert
  Code 15
  ED-180

Roger Booth
  Consultant
  Code 15
  EF-180

Thomas Sticht
  Expert
  Code 15
  ED-180

Edys Quellmalz
  Expert
  Code 15
  ED-180

Joseph Dorner
  Computer Specialist
  Code 16
  GS-334-12

Guest

Dr. Paul Espinosa, Director of the Office of Hispanic Affairs at KPBS-TV was a speaker at the Center on 5 October 1988.

On 11 October 1988 and 19 October 1988, Paul Reeder and Mr. Wayne Tripp, Southwest Regional Office of the Office of Civilian Personnel Management, were at NPRDC to review the NPRDC system for high grade promotions and advising the Center on the instruction/policy.

November

New Employees

Margaret Overton
  Staffing Clerk
  Code 00B
  GS-203-4

Paula Augustine
  Clerk Typist
  Code 11
  GS-322-4

Sylvia Jorrin
  Secretary
  Code 12
  GS-318-4

Kim Vetter
  Secretary
  Code 13
  GS-318-6

Valerie Hall
  Computer Specialist
  Code 15
  GS-334-11

AWCS Jeffrey Rians
  Code 141

FC1 Dennis Rayburn
  Code 223

Lee Norton
  Administrative Officer
  Code 11
  GS-341-11

Evelina Cusi
  Accounting Technician
  Code 21
  GS-525-5

Separations

Patricia Reece
  Secretary (Typing)
  Code 13
  GS-318-5

Velia Fematt
  Secretary (Typing)
  Code 13
  GS-318-5

Joanne Stager
Secretary (Typing)
Code 16
GS-322-3

Promotions

YN2 Tony Kindred
OS2 James Dewberry

Retirements

CDR Warren Millard

Seminar Workshop

Dr. Charles W. Simon was at the Center from 16-18 November to present an ONR-sponsored seminar/workshop entitled, "Introduction to Advanced Experimental Methods for the Behavioral Sciences."

Logo

The Commanding Officer and Technical Director approved the new Center logo 22 November 1988, see Figure 5.

Visits

RADM Donnovan, Commander, Naval Military Personnel Command and Deputy OP-01, visited the Center of 9 December 1988.

December

Retirement

Howard Wooten
Charles Cory

Professional Publications Award

This year's winner of the Professional Publications award is co-authored by Drs. Delbert M. Nebeker, James A. Riedel, and Mr. Barrie L. Cooper. Their paper, The Influence of Monetary Incentives on Goal Choice, Goal Commitment, and Task Performance, was cited for advancing the scientific base in the area of concern, placing the data in a larger theoretical context, and providing a stimulus for additional research.

Figure 5. NPRDC logo.

HISTORY OF THE CENTER

1 Jul 51   The Naval Personnel Research Unit, San Diego, CA was established under the Bureau of Naval Personnel to provide a personnel research facility close to the operating forces.

1 Jul 52   The U.S. Naval Personnel Research Field Activity was established in Washington, DC to provide an activity close to Navy users and systems.

26 May 61   SECNAV Notice 5450 redesignated the two field activities as U.S. Naval Personnel Research Activities.

10 Dec 68   OPNAV Notice 5450 redesignated the Naval Personnel Research Activity, Washington, DC as the Naval Personnel Research and Development Laboratory due to increased emphasis on R&D.

1 Aug 69   The Chief of Naval Operations redesignated the Naval Personnel Research Activity, San Diego, CA as the Naval Personnel and Training Research Laboratory

1 May 73   The Secretary of the Navy approved the establishment of the Navy Personnel Research and Development Center (NPRDC), San Diego, CA to provide a corporate personnel laboratory with an in-depth capability in the behavioral and management sciences. This action consolidated those research functions assigned to the Naval Personnel Research and Development Laboratory, the Naval Personnel and Training Research Laboratory, and the Personnel Research Division of BUPERS.

17 May 75   OPNAV Notice 5450 changed command and support responsibility for NPRDC from the Chief of Naval Personnel to the Chief of Naval Material (CNM).

22 May 80   NAVMATINST 5450.27B modified the mission statement to include Technical and Consultant Support and Services to CNO in the design, development, and operation of the Navy personnel system.

1 Oct 80   The Commanding Officer, NPRDC directed to report for additional duty to DCNO (Manpower, Personnel, and Training) (OP-01).

6 May 85   The disestablishment of CNM changed command and support responsibility for NPRDC from CNM to Chief of Naval Research (CNR).

24 Feb 86   The Secretary of the Navy changed command and support responsibility for NPRDC from CNR to Space and Naval Warfare Systems Command (SPA-WAR).

27 Mar 88   SPAWAR assigned transfer of the human factors function and associated research and development programs from NPRDC to the Naval Ocean Systems Center (NOSC).

31 May 88   Management control of NPRDC was transferred from SPAWAR to Chief of Naval Personnel (CNP)/Commander, Naval Military Personnel Command (NMPC). NMPC was specifically charged with direct management of NPRDC.

RESOURCES

NPRDC's funding for the end of FY88 is shown in Figures 6 and 7.

Funding

NPRDC operates under the research, development, testing, and evaluation (RDT&E) Resources Management System. Under this system, the final fiscal responsibility resides with the Commanding Officer and certain financial responsibilities are delegated to cost center managers. The reporting procedures associated with the Resources Management System provide financial information for both internal management and higher authority.

The principal mission sponsor—and prime "customer" for Center RDT&E products--is the Deputy Chief of Naval Operations for Manpower, Personnel, and Training (OP-01)/Naval Military Personnel Command. Significant sponsorship also comes from the Chief of Naval Research, the Marine Corps, and other Navy and DoD organizations, including the Systems Commands. The majority of RDT&E that the Center conducts is supported by direct Program 6 R&D funds, with 6.2, 6.3, and 6.4 efforts accounting for nearly all directly funded projects. A small portion of the funds are independent research (IR) and independent exploratory development (IED). In addition, a substantial portion of research, development, and analysis consists of "reimbursables"--specific problem-solving efforts requested by, and supported with funding from other organizations.

Personnel

Because R&D programs at NPRDC are mission-oriented, it is essential that the research force be multidisciplinary so that early consideration may be given to alternative approaches in research endeavors. The Center's staff is creatively diverse and equipped to meet this prerequisite.
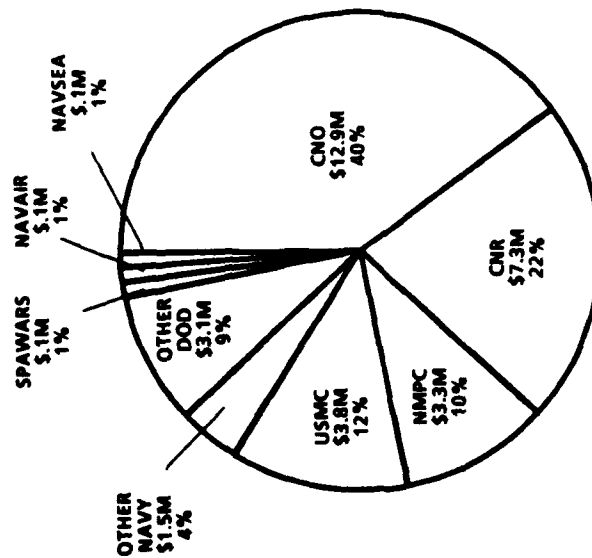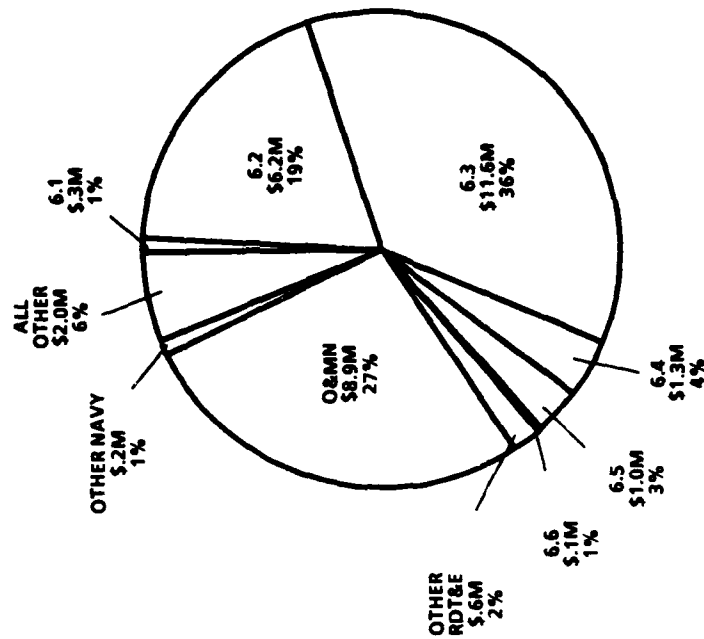
As of 30 September 1988, the staff numbered 25 military and 283 civilian personnel. Of the civilians, a little over 200 are professional and technical personnel representing a variety of disciplines. Of the professional and technical staff, 70 percent hold advanced degrees. The military staff consists of line officers and senior enlisted personnel. The military personnel offer extensive fleet and subject-matter expertise that helps ensure the operational relevance of NPRDC's R&D endeavors. This broad personnel base allows NPRDC to maintain a highly effective, multidisciplinary team approach to its R&D.

Facilities

NPRDC is located on Point Loma in San Diego, California, with support offices in Washington, DC. The Center occupies 18 buildings under a host-tenant arrangement with the Naval Ocean Systems Center. In addition to office space for research and support personnel, the following research facilities are housed at the Center:

● **Training Research Computing Facility (TRCF)** provides general Unix-based computing services and access to the Defense Data Network (DDN) for Center research

APPROPRIATION

6.1 $.3M 1%

6.2 $6.2M 19%

6.3 $11.5M 36%

ALL OTHER $2.0M 6%

OTHER NAVY $.2M 1%

O&MN $8.9M 27%

6.4 $1.3M 4%

6.5 $1.0M 3%

6.6 $.1M 1%

OTHER RDT&E $.6M 2%

6.1	–	Research
6.2	–	Exploratory Development
6.3	–	Advanced Development
6.4	–	Engineering Development
6.5	–	Management & Support
O&MN	–	Operation & Maintenance
RDT&E	–	Research, Development, Test, & Evaluation

SPONSOR

NAVSEA $.1M 1%

NAVAIR $.1M 1%

SPAWARS $.1M 1%

CNO $12.9M 40%

OTHER DOD $3.1M 9%

CNR $7.3M 22%

USMC $3.8M 12%

NMPC $3.3M 10%

OTHER NAVY $1.5M 4%

CNO	–	Chief of Naval Operations
CNR	–	Chief of Naval Research
NAVAIR	–	Naval Air Systems Command
NAVSEA	–	Naval Sea Systems Command
NMPC	–	Naval Military Personnel Command
SPAWAR	–	Space and Naval Warfare Systems Command
USMC	–	Marine Corps

Figure 6. FY88 funds--actual $32.2M.

35

DISTRIBUTION

TRAVEL
$.9M
3%

MATERIAL
$3.1M
9%

LABOR AND OVERHEAD
$17.8M
55%
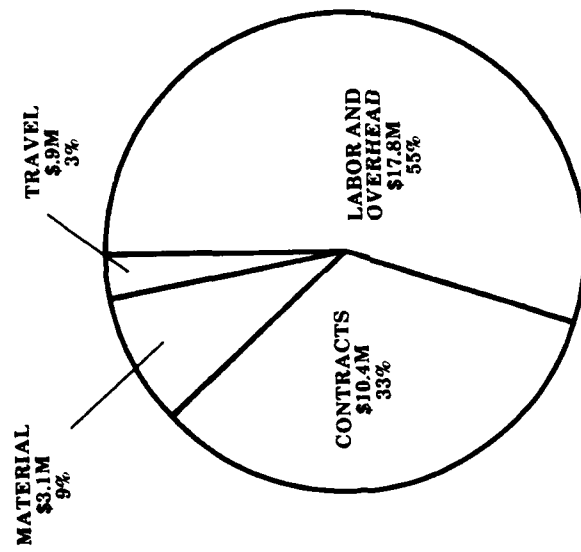
CONTRACTS
$10.4M
33%

Figure 7. Distribution of funds.

and support staff. The facility is supported by the Training Technology Department and provides computational and electronic mail support for research in areas of artificial intelligence, computer-assisted instruction, cognitive science, testing, and training. The TRCF equipment suite includes two Digital Equipment Corporation (DEC) VAX-11/780 computers and numerous peripherals.

● **Manpower and Personnel Computing Facility (MAPCOM)** provides general purpose IBM-based computing services for Center researchers and administrative operations. The facility is specially equipped to serve psychologists, economists, mathematicians, and computer scientists whose research requires the organization and analysis of large data files, the development of large-scale mathematical models, the design of information delivery systems, and general-purpose scientific computing. The MAPCOM features an IBM 4381/23, multiple tape drives, and over 25GB in disk storage.

● **System Simulation Facility** serves cognitive and organizational psychologists who are concerned with the measurement of human performance, neuroscience applications in personnel readiness assessment, and motivation of people in organizations. It includes equipment for biopsychological and psychophysiological measurement.

The above facilities are supplemented by two mobile laboratories that provide R&D support at sites away from the Center, and by a large inventory of computer equipment ranging from microcomputers supporting specific projects to the Center's IBM 4341, which is used both as a stand-alone processor and as a remote job entry station.

R&D PROGRAM

The research and development program at NPRDC addresses five functional areas: Manpower, Personnel, and Testing Systems, Education and Training, and Organizational Systems. Within these five functional areas we have 15 product lines, each of which has one or more projects.

Manpower

Develops new systems and methods for determining manpower requirements, allocating manpower resources, developing personnel inventories, and distributing/assigning those inventories to improve military readiness and control costs.

● **Force Management**--Develops large-scale systems for managing the flow of personnel (accessions, retention, promotion) to attain desired skill inventories within constraints of cost and feasibility.

● **Assignment Systems**--Designs systems for optimal job-person matches based on cost, fleet requirements, individual preferences, and a wide variety of assignment policies.

Personnel

Develops systems and procedures for recruiting, selecting, classifying, and utilizing officer, enlisted, and civilian personnel to improve performance and retention. Serves as the Chief of Naval Operations primary personnel survey resource to coordinate and conduct attitude surveys in the Navy and Marine Corps and to develop new survey technology.

- **Accession Supply Systems**--Designs systems to enhance the Navy's capability to attract appropriate supply of military accessions in terms of number, characteristics, and availability under differing social and economic conditions.

- **Selection and Classification**--Develops systems to predict military performance and tenure and to establish standards for school/job entry.

- **Career Development Systems**--Develops systems to analyze and develop policies and procedures that maximize the utilization of personnel throughout their careers.

- **Evaluation and Survey Systems**--Develops systems to evaluate the effectiveness of quality of life programs and to improve the quality of personnel survey data.

Testing Systems

Develops and evaluates personnel testing systems and Computerized Adaptive Testing (CAT) versions of the Armed Services Vocational Aptitude Battery (ASVAB). Serves as lead DoD laboratory for overall management of CAT research, development, implementation, and scientific support of the system.

- **Testing Systems**--Develops, procures, tests, and evaluates the microcomputer-based delivery system for the CAT-ASVAB program and is responsible for the design, development, and implementation of the CAT-ASVAB Maintenance and Psychometric (CAMP) facility.

- **Testing Research**--Provides research support for the development of the CAT version of the ASVAB as well as for the current operational paper-and-pencil version of the test battery (P&P-ASVAB).

Education and Training

Develops training technologies to enhance personnel readiness. Employs existing and emerging technologies in the development and application of training systems to alleviate Navy training problems and to improve the Navy's operational readiness.

- **Curriculum Acquisition, Development, and Revision**--Develops, tests, and evaluates systems designed to support the development of curriculum materials. These include automated systems designed to support instructor delivered training materials and systems for computer delivered training materials.

- **Schoolhouse Training**--Develops content specific instructional materials and processes designed to enhance the effectiveness and lessen the cost of the delivery of formal Navy Schoolhouse instruction.

- **Operational Training**--Develops training programs to support specific operational weapons systems including enhancements to existing programs, and applications of emerging training technologies to these systems.

- **Total Force Training**--Develops training resource management tools and warfare area and rating training continua methodologies.

- **U.S. Marine Corps Training**--Develops Marine Corps specific training programs including development of biopsychometric tools for the assessment of performance.

Organizational Systems

Develops and evaluates performance enhancement and control systems for improving the effectiveness, quality, and productivity of Navy personnel and organizations.

- **Logistics**--Determines requirements, designs, tests, and evaluates management methods and techniques appropriate for quality and productivity improvement in Navy logistics organizations. Research efforts are focused primarily on measurement-based approaches to systems analysis, process and performance measurement, and application of organizational theory. Techniques currently under development include Productivity Gain-Sharing (PGS), Total Quality Management (TQM) organization redesign technology, and program evaluation of experimental personnel policy changes.

- **Acquisition**--Determines requirements, designs, tests, and evaluates management methods and techniques appropriate for quality and productivity improvement in Navy acquisition organizations. Also, develops and tests innovative methods to design, administer, and evaluate management and professional training. In addition, job aids are developed and tested to determine their effects on workload accomplishment.

In addition, NPRDC has set up a Fleet Liaison Office (FLO) to maintain liaison with Fleet Commands, Type Commands, Systems Commands, CNO agencies, and R&D centers in matters related to NPRDC's mission areas, and serves as the Center's focal point for investigating and responding to requests for technical assistance. Monitors on a continuing basis operational problems, requirements, and priorities to determine RDT&E implications. Provides on-site consultative services to operational commands and performs quick-reaction studies or special projects as needed. Facilitates the implementation of the Center's R&D products. Also, the Fleet Liaison Office serves as the Center's agent for the Navy Science Assistance Program (NSAP).

Publications and Presentations

Technical Reports

Bjerke, D. G., Cleveland, J. N., Morrison, R. F., & Wilson, W. C. (November 1987). Officer Fitness Report Evaluation Study (TR 88-4). (AD-A189 377)

Culbertson, A. L., Feher, B., Moy, M. C., Simpson, H., & Ferrier, S. (April 1988). Building Decision Support Systems: The Bases and Stations Information System (BASIS) (TR 88-9). (AD-A193 696)

Essex Corporation. (April 1988). User's Manual for the Battle Group Information Database System (BIDS) (TR 88-10). (AD-B121 246)

Feher, B. (Ed). (February 1988). NPRDC Papers from the Second International Symposium on Human Factors in Organizational Design and Management (TR 88-7). (AD-A192 537)

Lewis, G. W., & Sorenson, R. C. (October 1987). Evoked Brain Activity and Personnel Performance (TR 88-1). (AD-A185 922)

Main, R., & Paulson, D. (July 1988). Guidelines for the Development of Military Training Decision Aids (TR 88-16). (AD-A197 820)

Malec, V. M., & Luszczak, M. (October 1987). Field Evaluation of Interactive Simulation for Maintenance Training: SH-3 Helicopter Electro-Mechanical Bladefold System (TR 88-2). (AD-A185 923)

Nebeker, D. M., Culbertson, A. L., & Sorenson, R. C. (February 1988). Laboratory Workload Prioritization and Acceptance System (LAWPAS) (TR 88-5). (AD-A191 976)

Nugent, W. A. (February 1988). Comparing Alternative Computer-based Methods for Presenting Job Task Instructions (TR 88-6). (AD-A192 295)

Robinson, C. A. (February 1988). A Hand-Held Training Aid in a Military Environment: Description and Proposed Evaluation (TR 88-8). (AD-A190 596)

Smillie, R. J., Nugent, W. A., Sander, S. I., & Johnson, D. M. (July 1988). A Comparative Assessment of Paper-based and Computer-based Maintenance Information Delivery Systems (TR 88-14). (AD-A197 908)

Taylor, B. E., Ellis, J. A., & Baldwin, R. L. (May 1988). Current Status of Navy Classroom Training: A Review of 100 Navy Courses with Recommendations for the Future (TR 88-11). (AD-B122 161)

Thompson, T. J. (May 1988). Evaluation of Assignment Policies Using Optimization Models (TR 88-12). (AD-A195 326)

Wetzel, C. D., Van Kekerix, D. L., & Wulfeck, W. H. (October 1987). Analysis of Navy Technical School Training Objectives for Microcomputer-based Training Systems (TR 88-3). (AD-A187 666)

Wetzel-Smith, S. K., Forgnoni, R. L., Richards, G. A., & Czech, C. (July 1988). Evaluation of a Low Cost Microprocessor-based Acoustic Analysis Training System (TR 88-15. (AD-B125 260)

Wilcove, G. (August 1988). Officer Career Development: Problems of Three Unrestricted Line Communities (TR 88-13).

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Dalton, R., & Turney, R. (March 1988). Bibliography of Unclassified Reports (AP 88-3). (AD-B120 721)

Farkas, A., & Sorenson, R. C. (January 1988). Strategic Plan for Navy Personnel Research and Development Center (AP 88-1).

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Scheifers, C. (Ed.). (April 1988). Command History for 1987 (AP 88-4). (AD-A195 243)

Scheifers, C., Dalton, R., & Mosley, L. (March 1988). Publications Handbook (AP 88-2).

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Sorenson, R. C., Scheifers, C., & Yellen, T. M. I. (Eds.). (September 1988). Prospectus: Short- and Long-Range Goals (AP 88-7).

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Alf, E. F., Neumann, I., & Mattson, J. D. (September 1988). Revision of the United States Naval Academy Selection Composite (TN 88-61). (AD-A200 237)

Baker, H. G., & Alba, P. A. (August 1988). Job Performance Measurement Package for the J-79 Jet Engine Mechanic (TN 88-49). (AD-A199 568)

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